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Evaluating and Enhancing Bulgaria's Competitiveness

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EVALUATING AND ENHANCING BULGARIA'S COMPETITIVENESS

by

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Abstract

Assigning Bulgaria a low "competitiveness index", the World Economic Forum's *Global Competitiveness Report (GCR) 1999* projects the country's per capita GDP growth at 1.68% p.a. through 2008. Such a meager performance would delay Bulgaria's entry into the European Union. Though not figuring directly in the GCR, the 4-firm concentration ratio and Herfindahl-Hirschman index suggest deficient competition in Bulgarian industry, where the state's dominant role is decreasing slowly. Measures to liberalise foreign trade are intensifying competition, but domestic producers resist lowering tariffs that remain relatively high. The paper advocates measures to enhance Bulgaria's competitiveness and thus readiness for EU membership. (*JEL* L11, L44)

(Keywords: competitiveness, industrial concentration, domestic competition)

EVALUATING AND ENHANCING BULGARIA'S COMPETITIVENESS[*]

1. Introduction

In 1999, for the first time, Bulgaria was included in the World Economic Forum (WEF)'s Global Competitiveness Report (GCR). It was not an auspicious debut; Bulgaria ranked No. 56 out of 59 countries covered in the report, followed only by Zimbabwe, Ukraine and Russia.[1]

Clearly a major factor in this low ranking is that economic reform has proceeded more slowly in Bulgaria than in most Central and Eastern European (CEE) countries. The rate of economic growth has been correspondingly lower, with recovery from the initial shock of transition undergoing a severe setback in 1996/97. Figure 1 tracks Bulgaria's annual growth rate from 1989. Moving the base point up to 1993, since 1994 was the first year when all eight CEE countries in Figure 2 experienced positive GDP growth, only Bulgaria showed significant negative average growth through 1998.
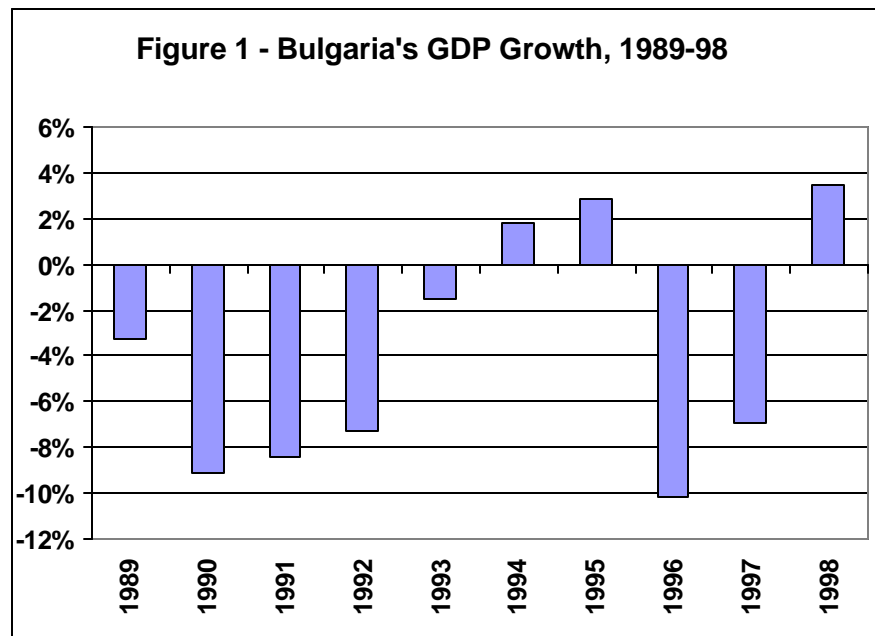
Figure 1 - Bulgaria's GDP Growth, 1989-98

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[1] To put Bulgaria's ranking in context, it should be noted that only five C. and E. European and two former Soviet republics figure in the report. However the four other CEE countries come in well ahead, the closest to Bulgaria being Slovakia, in 45th place.

Figure 2 - Average GDP Growth Rates, Central and Eastern Europe, 1993-98
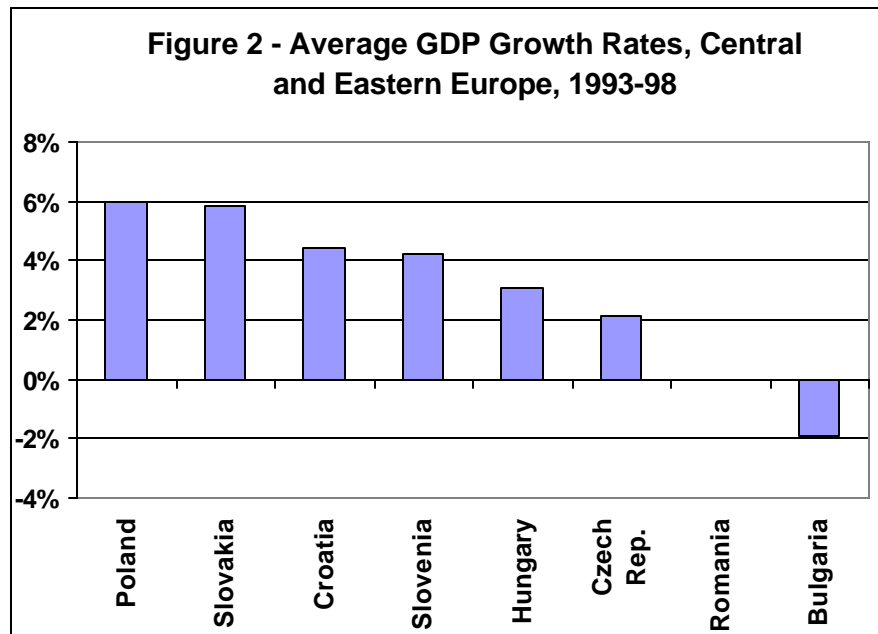
As it initiates formal discussions with the European Union about joining the EU within a time frame of ten years, give or take a few, Bulgaria is unavoidably concerned about its competitiveness. This paper focuses on indicators of the competitive structure of the Bulgarian economy going beyond those figuring in the GCR's index. It is our thesis that policies that improve those indicators will simultaneously raise Bulgaria's standing in the GCR universe.

We stop short of suggesting that the GCR's indices be expanded to incorporate the measures presented here. However, believing that enhancement of domestic competition is an essential ingredient both in accelerating Bulgaria's economic growth, and in preparing the country for eventual membership in the European Union (EU), we propose that the indicators discussed below be updated periodically to inform policy makers of their progress along that road.

The following section summarises the GCR's treatment of Bulgaria. We then review briefly the link between competition and growth, and present measures of concentration in Bulgarian industry. The data are compared both with industrialised countries and a country at Bulgaria's per capita income level, Morocco. After highlighting the need to enhance domestic competition in Bulgaria, we consider the role of foreign competition and the relative weights of currently traded, potentially tradable and nontradable goods and services in the consumption basket.

Section 7 reviews arguments for and against trade liberalisation in Bulgaria. Following an examination of competition in the market for nontradables, we consider the presence or otherwise of "natural monopolies" in Bulgaria. The concluding section proposes measures by which government can promote domestic competition and thus enhance Bulgaria's international competitiveness.

2. Bulgaria in the 1999 Global Competitiveness Report

The GCR ranks countries by an overall "Competitiveness Index" (CI), consisting of a weighted amalgam of scores on eight factors (weights given in parentheses): openness, government, finance, and labour (1/6 each); infrastructure and technology (1/9 each); and management and institutions (1/18 each). The first four factors being regarded as quantifiable, indices calculated from economic data are given a 75% weight in their measurement, as against 25% for indices derived from a WEF Executive Opinion Survey administered to about 4,000 business executives operating in the respective countries. For infrastructure and technology the 75-25 proportions are reversed, while for management and institutions, only indices computed from survey data are used.

The report describes as its "guiding principle…to construct an index that is correlated with economic growth" over a 5-year time horizon. This suggests the composition of the CI may even have been juggled in order to improve the correlation. Regression estimates that would tell us how close it is are not given in the report. However, the authors have sufficient confidence in the correlation to project the 59 countries' per capita GDP growth for the period 2000-2008, based on current CIs.

Again, the news for Bulgaria is not good: it ranks 55th in the list, at 1.68% per annum. Since population growth is currently negative, somewhere around –0.5%, this is indeed a bleak prognosis. If the GCR is correct, Bulgaria's economic growth will barely exceed 1% p.a. over the next 7-8 years. It is hard to imagine that such a performance would qualify the country for EU membership by 2010.[2]

None of the CI's eight factors refers to the structure of the economies being compared, or incorporates a measure of domestic competition. However, the GCR also includes results of a separate "Microeconomic Competitiveness" survey of business leaders and government officials, directed—and interpreted in the report—by Harvard Business School professor Michael Porter. The variables covered in the survey, grouped in category 1, company operations and strategy, and 2, the national business environment, are amalgamated into a Microeconomic Competitiveness Index (Porter calls it the MICI—for clarity we will sometimes refer to it below as "the Porter index"). One of the business environment variables is "intensity of local competition".

Comparing the rankings of different countries on the CI and MICI, Porter finds significant differences among industrial countries, however the rankings converge at the bottom. Compared with its No. 56 slot on the CI, Bulgaria rises no further than No. 54 on the 1999 MICI.

In bivariate regressions of 1992-98 per capita GDP growth on the variables making up the MICI, intensity of local competition turns out to be "the most influential single variable", explaining over a third (36%) of the differences in growth across countries. Still, it must be

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[2] The GCR is considerably more pessimistic than the Bulgarian authorities and the IMF, who have agreed on a projected GDP growth rate averaging 4% per annum over the period 2000-2006. Whether this would qualify Bulgaria for EU membership in ten years is, however, still questionable.

stressed that this variable is a subjective ranking, on a scale of 1 to 5, by the respondents to Porter's survey.

For each country, Porter lists three primary comparative advantages and disadvantages with respect to microeconomic competitiveness. For Bulgaria, lack of local competition figures as the main comparative disadvantage. (The other two are nonavailability of business information, and poor quality of telephone/fax infrastructure. Bulgaria's three comparative advantages are: quality of scientists and engineers, lack of bureaucratic "red tape", and quality of science research institutions.)

3. Competition and Economic Growth

According to introductory neoclassical theory, the higher the barriers to entry in an industry, and thus the greater the market power of member firms, the lower the price-elasticity of demand for their products, the higher the prices at which profit is maximised, the lower total output and sales, and the greater the deadweight economic loss.

Conversely, barring increasing returns to scale, as in sectors termed "natural monopolies", the more competitive an industry, the more price-elastic the demand for each firm's output, the larger the total output and the lower the prices at which firms maximise profit (equating marginal cost and marginal revenue), and hence sell their output. Moreover, the greater the incentive for firms to innovate in order to reduce costs and thereby increase market share and profits.

In the ongoing debate about growth strategy of developing and transition economies, the success of export-oriented industrialisation in the Asian "tigers", and a few South American countries, has added another dimension to the link between domestic competition and growth. Operating in a competitive environment, local industries saturate the domestic market and find themselves with growing excess capacity. This compels them to surmount the commercial and psychological barriers posed by entry into export markets, converting them into exporters whether or not they so aspired initially.

To be sure, this phenomenon is not limited to newly industrialising countries (the so-called NICs); it was a major factor in U.S. economic development, and explains much of the dynamism of the European Common Market, now Union. In the case of a small economy such as Bulgaria—population of 8 million, GDP around $10 billion—exporters will have to specialise in a very limited number of clusters, but this is the only way to expand the country's production possibility frontier, raise productivity and achieve an acceptable rate of growth.

The neoclassical aversion to market power is qualified by economists who see the most important innovations, both technological and managerial, emanating from firms that acquire market vision, and the cashflow needed to put it into practice, precisely by amassing market power. These economists do not oppose efforts by competition authorities to control overtly restrictive business practices (RBP) such as *horizontal* collusion and coercion. However, they are generally critical of agencies that see themselves called upon to limit market shares by blocking mergers and acquisitions and breaking up firms that have expanded by aggressively competitive but otherwise perfectly legal tactics.

This viewpoint has also figured in the changing attitude towards *vertical* integration of an industry's down- and upstream stages. Competition authorities that once insisted on separating input suppliers, processors and distributors, now accept that vertical integration can strengthen firms' competitive position—provided that competitors, domestic or foreign, do indeed exist.

We do not purport to be able, in this space, to prescribe market shares for firms in various Bulgarian industries, consistent with an intensity of competition that would optimise the country's Porter index and thus raise its growth rate significantly above the WEF's dire prediction. However, it is worth examining some measures of industrial concentration in Bulgaria, as well as evaluating the steps the country has recently taken to increase the openness that figures importantly in the GCR's competitiveness index.

4. Concentration of Bulgarian Industry

Analysis of industrial structure conventionally uses two measures of concentration:
1. the proportion of output accounted for by the X largest producers in a branch, or "Concentration Ratio X"—here we will use X=4, and call the index CR4; and
2. the Herfindahl-Hirschman index (HHI), comprising the sum of squares of individual market shares of all firms in an industry, the shares being converted to whole numbers (i.e. multiplied by 100). If a firm has a 25% share, it contributes $25^2 = 625$ to its industry's HHI. The larger the number of firms with small shares, the closer the index tends towards its minimum, zero; the maximum (case of a monopoly) is $100^2 = 10,000$.

Four-firm concentration ratios. Table 1 compares the distribution of Bulgarian, U.S. and Moroccan industrial or manufacturing branches among CR4 quintiles—in other words, the proportions of branches whose CR4s range between 0 and 19%, 20-39%, 40-49%, 60-79%, and 80-100%. The Bulgarian coefficients are computed from National Statistical Institute (NSI) 1996 data for about 10,000 state-owned and 30,000 private firms, or roughly 40,000 firms in total. The firms cover branches of industry in addition to manufacturing, including mining, construction, electric power and other utilities. According to World Bank (1999), nonmanufacturing accounted for one-third of Bulgaria's industrial output in 1998.

The table defines Bulgarian concentration ratios according to two alternative criteria: revenue and assets. Thus, for example, the table's top left cell shows that in 43% of Bulgaria's 363 industrial branches, the four firms with the highest asset value account for 80 to 100% of total branch assets. The adjacent cell shows that, in half (50%) of the branches, the four firms with the largest revenue account for 80-100% of total branch revenue.

At the lower end, defining concentration by revenue, only 3% of Bulgarian industrial branches are characterised by ratios below 20%, and 16% below CR4=40%. If concentration is defined by assets, the proportion of branches with very low CR4s rises to 10%.

The U.S. data are taken from the Bureau of the Census' 1992 Census of Manufactures, which computes CR4s based on firms' shares in the value of shipments. The competitive character of the U.S. economy is illustrated by the fact that only 5.5% of U.S. branches fall in the top CR4 range, while over half—54%--feature CR4s below 40%.

The Moroccan data are computations by Mounsif and Gray (1990) based on sales of manufacturing firms as reported in the 1986 Industrial Survey. Morocco is taken as a comparator in the first instance because CR4 data for the year in question are readily available, but the comparison with Bulgaria also carries intrinsic interest because the two economies show striking similarities. Thus, according to the World Bank's latest figures (WB 1999), 1998 per capita GNP was $1,230 for Bulgaria and $1,250 for Morocco, and manufacturing accounted for 17% of GDP in each case.

Notwithstanding an economy 3¼ times as large as Bulgaria's—the ratio of the two populations—Morocco's manufacturing sector is far less diversified. Compared with the 40,000 industrial firms covered by Bulgaria's NSI, Moroccan manufacturers currently number just over 6,000 (as against roughly 4,000 at the time of the 1986 survey). Seeking the most detailed feasible classification of branches of manufacturing, the 1986 Moroccan industrial survey identified only 98, as against the NSI's 363 branches for Bulgaria's industrial sector. Nonmanufacturing industry, which groups just a handful of branches, explains only a small fraction of the difference,

Yet Table 1 shows a striking similarity in levels of concentration. This is highlighted by Figure 3, contrasting the similar patterns of Bulgaria and Morocco with the very different distribution of CR4s in the vastly larger and more competitive U.S. economy. In section 5 we draw implications from the Moroccan case for Bulgaria's economic strategy.

Table 1 - Distribution of Industrial/Manufacturing Branches by 4-Firm Concentration Ratios (CR4) Bulgaria, Morocco and the U.S.

	Branches falling into CR4 ranges defined by: (…) Proportions (%) of total number of branches			
	Bulgaria – 1996		**Morocco –**	**USA – 1992**
CR4 defined by: (…)	**(assets)**	**(revenues)**	**1986 (sales)**	**(value of shipments)**
80-100 %	43	50	46	5.5
60-79 %	17	19	21	13.4
40-59 %	16	15	19	27.4
20-39 %	14	13	11	37.3
0-19 %	10	3	2	16.4
Total %	100	100	100	100
Total no. of branches	**363**	**363**	**98**	**456**

Sources:

Bulgaria – Author's computations from National Statistical Institute's Industrial Survey 1996.
Morocco – T. Mounsif & C. Gray (1990), and C. Gray (1991).
USA – Computations by the author from U.S. Bureau of the Census (undated).

Figure 3 - Distribution of Bulgarian, U.S. and Moroccan Industrial Concentration Ratios (CR4)
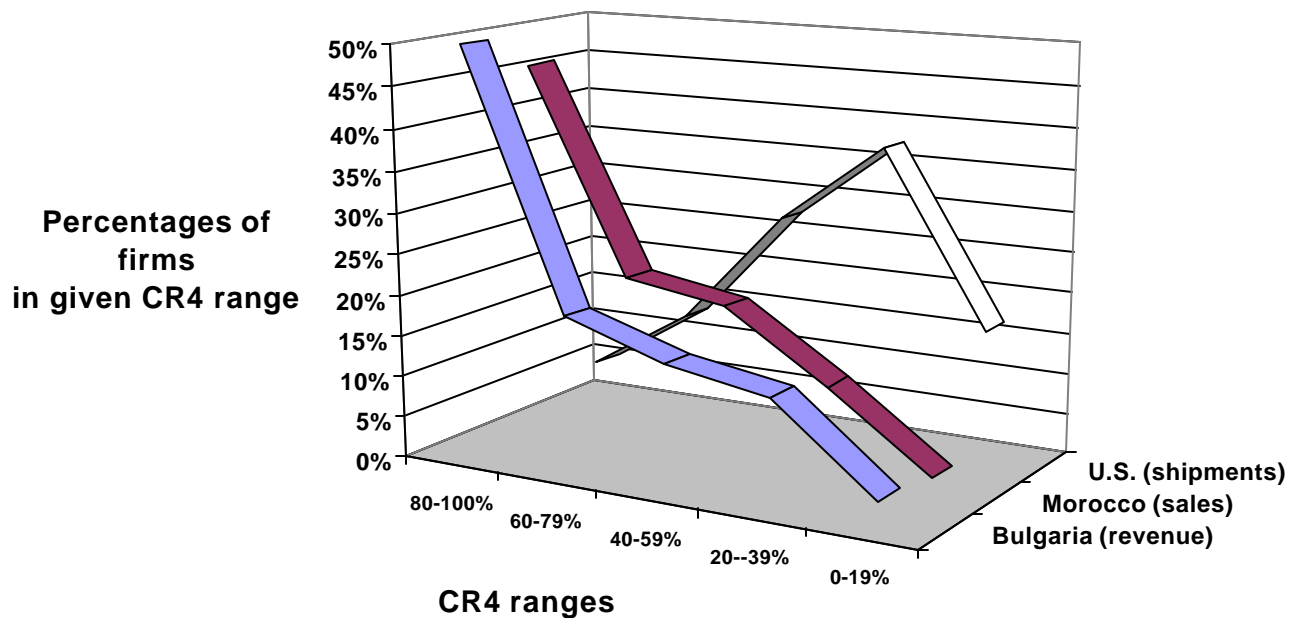
Disaggregation to the branch level is another way of comparing concentration among countries. UNCTAD's *World Investment Report 1997* gives CR4s for 25 branches of manufacturing in the U.K. and five other OECD countries. The branches are categorised according to the importance of economies of scale, a key entry barrier.

Taking 16 branches (out of the 25) for which comparable ratios can be computed for Bulgaria, Table 2 compares 1987 average CR4s for the six countries, U.K. values for 1992, and Bulgarian ratios in 1996. Figure 4 compares Bulgaria and the OECD averages, showing that Bulgaria has substantially higher ratios in every branch, falling below 66% in only one, basic food industries.

**Table 2 – Four-Firm Concentration Ratios by Branch of Manufacturing –
Bulgaria, U.K. and Average of Six OECD Countries**

Branch	Concentration ratio - CR4 (%)		
Large production scale economies	**Six OECD countries 1987 (avg.)**	**U.K. 1992**	**Bulgaria 1996**
Producer chemicals	45	44	94
Electrical (excluding * below)	42	39	77
Ships & rail stock	54	64	81
Processed food, drink, tobacco	46	62	71
Cables, telecoms. equipment*	47	37	100
Iron & steel	61	80	100
Non-ferrous metals	40	43	96
Cement	51	78	88
Glass	40	50	88
Average	47.3	55.2	88.3
Smaller prod. scale economies			
Textiles	24	28	71
Basic food industries	34	34	51
Other building materials	28	40	85
Metal goods	18	16	66
Clothing & leather	14	27	71
Timber & furniture	16	18	73
Paper, printing & publishing	25	16	74
Average	22.7	25.6	70.1

Source:

OECD & UK: UNCTAD, *World Investment Report 1997*, p. 139. OECD ratios are unweighted averages for USA, Japan, U.K., Germany, Italy and Belgium. Basic food industries comprise grain milling, animal feeds, meat and fish products.

Bulgaria: Author's computations from National Statistical Institute's Industrial Survey 1996.

Figure 4 - Four-Firm Concentration Ratios by Branch of Manufacturing, Bulgaria and Average of Six OECD Countries
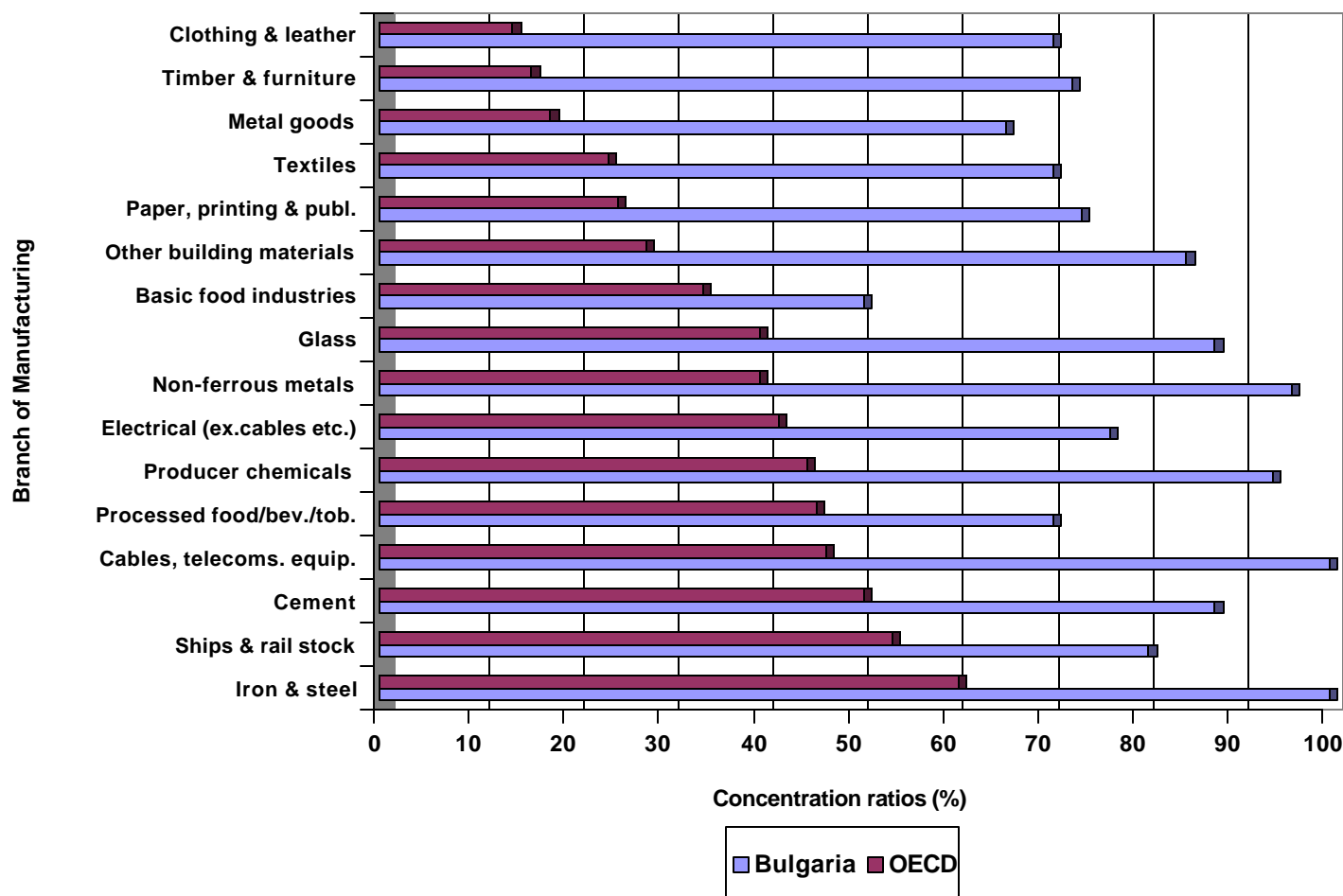
The Herfindahl-Hirschman Index (HHI). This index of concentration holds interest not only as a more precise measure than the CR4, taking account of each producer's exact market share, but also because the U.S. competition agencies—the Federal Trade Commission and the Department of Justice's Antitrust Division —use it as a policy tool in evaluating the competitive impact of proposed mergers and acquisitions.

Specifically, the *Horizontal Merger Guidelines* (1992) issued jointly by the two agencies define three regions of the HHI:[3]

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[3] U.S. Department of Justice and Federal Trade Commission (1992), sec. 1.51. The 1992 *Guidelines* remained in effect through 1999.

1. Post-merger HHI below 1,000: "markets in this region (are) unconcentrated… mergers are unlikely to have adverse competitive effects and ordinarily require no further analysis."
2. Post-merger HHI between 1,000 and 1,800: such markets are regarded as "moderately concentrated." Mergers raising the HHI by 100 points or less are viewed as in (1) preceding. Increases exceeding 100 points "potentially raise significant competitive concerns" and require further analysis by the relevant agency.
3. Post-merger HHI above 1,800: such markets are regarded as "highly concentrated." Here, mergers raising the HHI by less than 50 points are viewed as in (1); increases of 50-100 points require further analysis, as in (2); and increases exceeding 100 points "will be presumed…likely to create or enhance market power or facilitate its exercise…"

Table 3 compares the distribution of Bulgarian and U.S. industrial or manufacturing branches among four ranges/values of the HHI. As in Table 1, Bulgarian firms are classified alternatively according to their assets and revenue. Over half the Bulgarian branches (on the revenue criterion, 57%) are either monopolies or highly concentrated, as against 12% in the U.S. (where monopolies are absent). Conversely, only about one-fourth (26%) of Bulgarian branches feature low concentration, as against a figure of three-quarters for the U.S. Figure 5 dramatises the comparison.

Table 3 - Distribution of Industrial/Manufacturing Branches by Herfindahl-Hirschman Index (HHI) - Bulgaria and the U.S.

	Bulgaria (assets or revenues)				USA (value of shipments)	
	No. of branches		% of 364 branches		No. of branches	% of 458 branches
HHI	**Assets**	**Revenues**	**Assets**	**Revenues**		
Monopoly: 10,000	29	29	8	8	0	0
High: 1,800 to 10,000	193	180	53	49	54*	11.8*
Moderate: 1,000 to 1,800	70	63	19	17	63	13.8
Low: < 1,000	72	92	20	26	341	74.5
Total	**364**	**364**	**100**	**100**	**458**	**100**

Sources:
  Bulgaria – Author's computations from National Statistical Institute's Industrial Survey 1996.
  USA – Computations by the author from U.S. Bureau of the Census (undated).
* The figure of 54 branches includes 11 where, for reasons of confidentiality, the U.S. document withholds HHIs. However, CR4s are given for ten of those branches; nine of the ratios exceed 80, the tenth is 70. Perusal of the remainder of the list reveals no case where a CR4 80 corresponds to an HHI below 1,800.

Figure 5 - Distribution of Herfindahl-Hirschman Indices (HHIs) in Bulgarian and U.S. Manufacturing
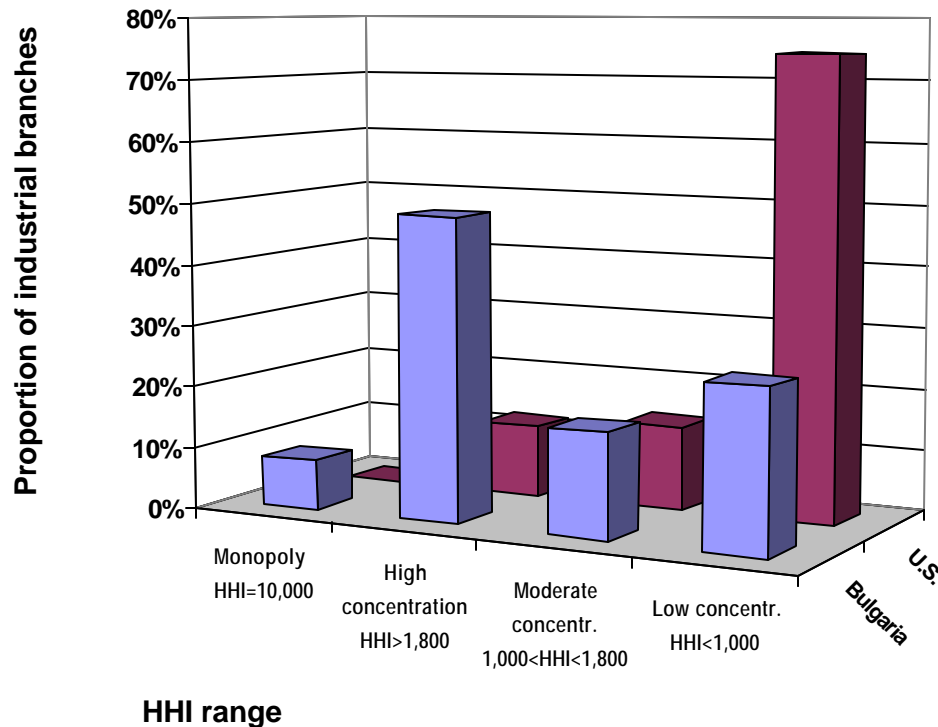
Impact of market power. The deadweight loss occasioned by exercise of market power should be demonstrable in a correlation of supranormal profitability and concentration. For industries with low concentration, expected supranormal profit—i.e. profit exceeding the opportunity cost of equity capital—is zero, while in highly concentrated industries it is positive.

Given the limitations of NSI data, we have to accept the ratio of accounting profit (revenue less expenditure) to revenue as a proxy for supranormal profitability. Figure 6 graphs the relationship between recorded profitability and concentration of Bulgarian industry during the first quarter of 1998.

Figure 6 – Recorded Profitability and Concentration in Bulgarian Industry, 1st quarter 1998
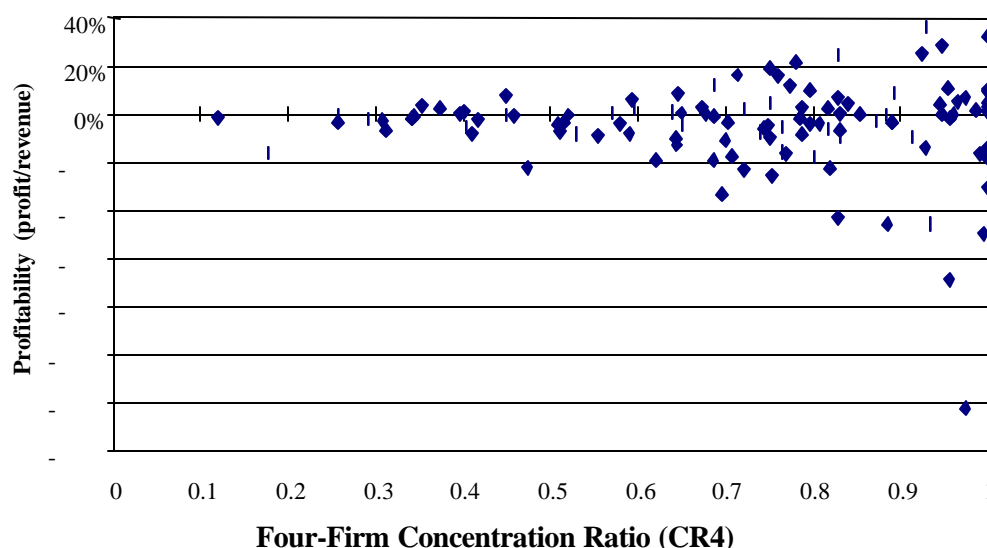
For competitive industries—those with a CR4 < 0.5—the correlation is consistent with theory. Profitability is around zero and the variance is small (0.4).

On the other hand, results for monopolies and oligopolistic industries, with CR4s above 0.5, are contradictory. Some of these branches show large profits, while others display even greater losses. This outcome has a simple explanation. Since they are all state-owned, Bulgarian monopolies are not obliged to follow market incentives. The profit motive gives way to goals such as high employment and other socio-political objectives. Firms that are subject to price control on the basis of stated costs, and/or dependent on subsidies, face an incentive to exaggerate their costs.

While the monopoly power of some state-owned enterprises (SOEs) results in high profits, in other cases, even worse, it yields huge losses and/or arrears, leading to inefficient allocation of resources. Labour mobility is undercut, while below-cost pricing and political pressure for protection from foreign competition block entry of new firms.

Status of competition outside Bulgarian industry. No data are available from NSI that would enable us to compute concentration indices for sectors other than industry. As in the rest of CEE, the share of services in Bulgaria's GDP has more than doubled during transition—from an estimated 26.7% in 1987 it had reached 55.7% in 1998.[4] The sector includes public administration and competitive activities such as retail trade, but financial services, transport, communications, and wholesale trade are major subsectors subject to varying degrees of competition. SOEs with substantial market power still play a large role in these areas.

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[4] World Bank (1999).

Such subsectors figure in Professor Porter's business survey, even if not systematically, and his finding that Bulgaria's principal competitive disadvantage on the international level is a lack of local competition undoubtedly takes into account activities other than industry.

5. The need to Enhance Competition in Bulgarian Industry

The measures of concentration in the preceding section reinforce Professor Porter's finding. Bulgarian industry cries out to be restructured by means of competitive forces. *Inter alia* this undoubtedly means sacrificing a fair proportion of the plethora of existing branches—364 at the SIC 4-digit level, no less—in order to focus on clusters where Bulgaria can become competitive.

Here the comparison with Morocco has something to say for Bulgaria's industrial strategy. Morocco's mediocre economic performance—average annual 2.5% growth of GNP during 1988-98, 3.1% growth of manufacturing value added—contrasts starkly with its location at the EU's doorstep, 13 km. across the Strait of Gibraltar from Spain. The WEF's *Africa Competitiveness Report 1998* assigns much of the blame for this situation to the government's persistent shielding of enterprises owned by the state or the royal family from both domestic and foreign competition.

According to the same source, Morocco's greatest hope is the commitments it has accepted under the Euro-Mediterranean Association Agreement, leading to a free trade area with the EU by 2010. This will unavoidably force many state- and palace-owned enterprises to restructure. Some will close down, others will establish or reinforce links with EU and other multinational firms, specialising in lines of production where Morocco can develop a competitive advantage, ceding other lines to outsiders.

Given Bulgaria's much smaller economy, the urgency for it to enter into a similar arrangement with the EU is even greater. The sooner this happens, the sooner competition will take hold and create the gains in productivity that underlie any country's economic growth. The following section reviews the contribution of Bulgaria's present foreign trade regime to the economy's competitiveness.

6. Bulgaria's Foreign Trade Regime

By itself, liberalising foreign trade is not sufficient to bring about a desirable level of competition in Bulgaria, because not all goods and services are tradable. We define as "tradables" those goods and services that market forces now cause, or would eventually cause, to be imported into and/or exported from Bulgaria in the absence of administratively established barriers, including import duties and export levies.

Conversely, "nontradable" goods and services are those whose cost of transport into or out of Bulgaria would make the item noncompetitive with domestic production, either abroad (case of exports) or in-country (imports). This applies typically to bulky and/or perishable commodities, and to services where ease of access is a key determinant of consumer preference.

Even if it doesn't go all the way, trade liberalisation is a major (and indispensable) contribution to enhancing domestic competition, and—abstracting from political opposition by domestic producers—it can be accomplished in less time than the administrative processes required to restructure domestic monopolies and oligopolies.

The trade regime enacted by Bulgaria in early 1998 simplified import procedures and liberalised importation of major commodity categories. Foreign goods are now divided into two groups, requiring either permission or simply registration:

1. "Permission" applies to 16 categories of "strategic" goods, notably precious metals, arms, hazardous chemicals, pharmaceuticals, and natural gas. Only the latter two figure in the basket underlying the consumer price index (CPI).

2. The registration procedure is not burdensome. The law prohibits government from setting quotas or otherwise limiting inflow of the goods in question.

The customs tariff now in force applies low rates—0-15%--to goods (a) currently not produced in the country, or (b) serving as inputs to local industry. Conversely, consumer goods with a "high" degree of processing that are currently produced in Bulgaria enjoy protective customs tariffs (25—75%). This includes basic foodstuffs—dairy products, meat (poultry and pork), bread, etc.—clothing, footwear, and automotive fuel.

Import tariffs are a major component of the "openness" factor in the GCR's competitiveness index. The quantitative data index accounting for 75% of openness is an average of three variables: tariffs, capital account restriction and exchange rate competitiveness.[5]

Tariffs affect the CI insofar as they influence prices of intermediate inputs, as well as of wage goods that in turn determine the cost of a country's labour. To get a feel for the impact of tariffs on Bulgarian wage costs, we look at the relative shares of tradable and nontradable goods in the consumer basket. Taking into account that Bulgaria currently does not import significant volumes of some goods that are tradable in the medium to long term, we break the tradable category into subcategories of "current" and "potential" tradables. Table 4 gives the three categories' weights in the 1998 CPI and its principal constituents.

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[5] Warner (1999), p. 97.

Table 4 - Weights in the CPI and its components, of current tradables, potential tradables, and non-tradable goods and services

Category	Current tradables	Potential tradables	Non-tradables	Total
CPI basket – total	**14.1**	**45.9**	**40.0**	**100**
Components of the basket:				
Foodstuffs	17.2	46.8	35.9	100
Nonfood commodities	16.7	72.9	10.4	100
Services	0	0	100	100

Current tradables comprise goods not now produced in Bulgaria, such as citric fruits, coffee, cocoa, and automobiles, as well as Bulgarian goods that compete with imports, including household appliances, some foodstuffs, etc. Potential tradables include foodstuffs such as sausages, tinned foods, milk products, and poultry, as well as clothing, pharmaceuticals, and footwear. Nontradables comprise services, perishable foodstuffs and so-called "Bulgarian-patent" products.

Considering that a portion of the current tradables, and nearly all the potential ones, are subject to protective tariffs in the 25-75% range, these apply to roughly half (45.9 + part of 14.1%) of Bulgaria's consumer basket. In other words, the current trade regime exerts strong upward pressure on Bulgaria's labour costs.

7. Opposition to Trade Liberalisation in Bulgaria

Like many of their foreign counterparts, Bulgarian producers claim that tariff and other forms of protection against foreign competition are needed to safeguard employment and income. Given the extent of concentration in Bulgarian industry, these voices carry political and economic clout. In addition, some policymakers point to loss of government revenue if import tariffs are cut.

As elsewhere, these arguments support preservation of the status quo, and ignore the dynamic impact of global competition on a backward, stagnant economy. Counter-arguments in Bulgaria's case include the following:

- Protection, whether through tariffs or quantitative controls, raises domestic prices and, as indicated earlier, lowers output and consumption, involving deadweight economic loss.
- Competition from imports helps the Bulgarian Currency Board restrain inflation.
- Lack of external competition removes a stimulus for local producers to optimise their technology and raise productivity.
- The resulting technological lag prevents local production from catching up to world standards.
- Delaying the liberalisation to which Bulgaria has committed itself in the process of seeking EU membership will postpone entry into the Union and its beneficial impact.
- Maintaining a range of customs tariffs creates widely differing effective rates of protection (ERPs), retaining and attracting labour and capital into noncompetitive activities rather

than ones where Bulgaria can establish a competitive advantage. This delays the required economic restructuring and specialisation.

- Customs accounted for less than 7% of government revenue in 1997, and the share decreased in the two succeeding years. As trade increases in relation to GDP, a growing import base, to which both the VAT and (declining) tariff rates will apply, should strengthen rather than diminish revenue.

Relevance of the "infant industry" argument. This argument for temporary protection, touted in Bulgaria as elsewhere, is based on the presumption that new domestic industries can exploit *external economies* and *dynamic increasing returns*. External economies arise when a critical number of firms, concentrated in a given region, not only compete but also share a network of suppliers, a mobile and flexible labour pool, and specialised knowledge. The information revolution, including the Internet, facilitates the sharing of many forms of knowledge with no need for proximity, but informal knowledge, no less important, represents a significant by-product of geographical clusters. Short-term protection provides time to achieve competitiveness by establishing these conditions.

The increasing returns argument is derived from the concept of the learning curve. Firms benefit by being the first to enter an industry, learning from experience, establishing brand loyalty, securing access to scarce resources, etc.

Both arguments have merit, but they overlook the trade-off between import substitution and exporting as factors of production are diverted from export-oriented to protected industries. The result is almost always lower productivity. Supposed infant industry protection also risks provoking partner country retaliation, denying both parties gains from trade.

Specific issues for Bulgaria include:

- Current high tariffs apply to products such as textiles and clothing, which cannot be considered infant industries.
- Market power and the corresponding threat of higher prices impede the Currency Board's effort to suppress inflation.
- A small local market such as Bulgaria can only achieve external economies by being outward-oriented, but protection orients them inward. Infant industry protection may have been successful in countries with large domestic markets, but even in countries such as Japan and Korea some of the most successful industries never received protection.
- The Bulgarian government is no more likely than most other governments to out-guess fast-changing markets and select the right businesses to protect. On the other hand, mistakes are costly.

8. Competition in Markets for Nontradables

We saw in Table 4 that 40% of Bulgaria's consumer basket comprises nontradable goods and services, where foreign competition will never be a factor. Here, the extent of domestic competition figures importantly in price formation and its impact on international competitiveness.

The monopoly or oligopoly position of SOEs operating in these markets is a severe drag on Bulgaria's transition to a free market economy. The government has felt constrained to

delay privatising many of them while seeking ways of forestalling abuse of market power by future owners.

The impact of noncompetitive market structure corresponds to a deviation of the CPI from the level it would assume given optimally competitive domestic markets. This we denote by CPI.[6] (We say "optimally" rather than "perfectly" because the long-standing doctrines of monopolistic (E.H. Chamberlin) and imperfect (J. Robinson et al.) competition have demonstrated that perfect competition is very rare in the real world.)

Next we define n as the share of nontradables in the CPI; C_n, an index of current unit production costs for nontradables; and CPI_n, the subindex in the CPI reflecting current retail prices of those items.

Finally, we define the following coefficient:

$$c = (CPI_n - C_n)/C_n$$

corresponding to the proportional increment in the subindex arising from exercise of market power by producers of nontradables. Barring administrative intervention, or pursuit of objectives other than profit maximisation, the increment contributed by a pure monopoly in respect of its product will consist of the proportional difference between the price that would prevail in an "optimally" competitive market, and the price at which the monopoly maximises profit, i.e. the price that equates marginal revenue with marginal cost. That difference will in turn be a function of the monopoly's marginal cost and the price elasticity of consumer demand over the relevant segment of the demand curve.

Conversely, oligopolistic industries will contribute a smaller increment, the magnitude depending on producers' strategic choices.

Since $n = 40\% = 0.4$, we can now write:
$$CPI = 0.4c$$
This is the burden on Bulgaria's international competitiveness, imposed by noncompetitive domestic markets for nontradable goods and services. This burden is augmented, of course, to the extent that the administrative measures cited earlier obstruct importation of potential tradables.

Considering this burden, we recommend: (1) that the Bulgarian government undertake to measure the coefficient c by comparing prices of a randomly chosen sample of nontradables with those of similar goods and services in countries at comparable per capita income levels;[7] and (2) that measures be taken to enhance competition in these markets. Some such measures are described in the concluding section below.

The actions proposed have two objectives:
* to reduce the coefficient c; and
* to decrease unit production costs, as competition goads producers into raising productivity.

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[6] Note that this term should not be interpreted as "change in the CPI over time", in the sense of a rate of price increase.

[7] Adjustments will have to be made for price variations that reflect differences in resource endowment, for example, availability or otherwise of cheap hydro power.

While our concern in this section has been with nontradables, we recall here the contribution of domestic competition to making producers efficient enough to compete with tradables, both locally and in export markets.

9. Economies of Scale and Natural Monopolies

In industrialised as well as developing countries, industries featuring significant economies of scale tend to be relatively concentrated. In Table 2, nine industries to which UNCTAD attributes "large production scale economies" in six OECD countries (1987) and the U.K. (1992) average CR4s more than twice as high as seven industries featuring "smaller" economies of scale. In Bulgaria, on the other hand, the industries with less important economies of scale display a mean CR4 of 70%, as against 88% for the nine other industries. This is because competition was intentionally restricted under central planning.

Notwithstanding important scale economies, no manufacturing industries, whether or not included in Table 2, can be described as **natural monopolies**, in Bulgaria or anywhere else. This concept applies, rather, to a steadily shrinking set of public utilities, such as domestic water supply and sewerage, as well as distribution of electric power, where duplication of facilities would greatly raise average costs.

In the past, activities such as power generation and heating, telecommunications and postal services, and railway transport were also considered natural monopolies. But technological progress and organisational reform, such as unbundling of public services, have opened the way for competition in these areas. See, for example, the increasing competition to traditional telephony from cellular phones and the Internet. In many sectors, international trade has made external economies more important than production scale economies.

In Bulgaria, the government continues to maintain barriers to entry in many public utilities. Visible barriers include requirements for special licences, patents, concessions, donations, and legislative monopolies; invisible one include preferential credits and tax concessions for SOEs. The negative effects of these measures usually exceed any returns from exploiting economies of scale. State-owned monopolies become less and less efficient as management is corrupted, assets are stripped and productivity plummets.

Stated reasons for preserving state monopolies, apart from exploitation of scale economies, include concern for standards of service and subsidisation of low-income customers. But the opposite has happened. Service quality has declined, while sky-rocketing losses have obliged government to provide money that is then siphoned off.

Current efforts to reverse the process include a plan to unbundle and privatise power generating plants under the National Electric Company, as well as portions of the telecommunications network and railway system. Ancillary activities such as billing and fee collection can be privatised rapidly. If unbundled activities at different stages are allowed to become profitable, competition will rapidly enter in.

10. Measures to Promote Competition - The Role of Government

Many entry barriers and other restrictions on competition remain in force in Bulgaria. Irrespective of the importance of scale economies, stimulating competition cannot do any harm, even for activities classified as natural monopolies. The following steps are called for:

Removal of state barriers to entry
- ***Privatisation.*** Continued state ownership is the main impediment to entry of new firms and liquidation of loss-making enterprises. SOE managers are rewarded for fulfilling political commitments to maintain employment and social services, rather than for raising productivity. Many have yielded to corruption. While awaiting a change of ownership they have no incentive to improve financial ratios. In order to establish the lowest possible price at which to buy their company, worker/management teams undermine efficiency. Refusal to close loss-making enterprises slows privatisation and entry of new firms, as private capital waits for openings to extract profit from SOEs.
- ***Freedom of entry and exit.*** Barriers to entry should be removed. This involves suspending "donations" and abolishing production licenses, concessions, and the like. Where this is not possible—in fields related to national security and health care, or for environmental or other social reasons—procedures should be simplified. Licences and concessions will have to be retained, but procedures should be transparent and simple, ensuring equal rights to all applicants.
- ***Liquidation of state holding companies.*** A number of such agencies are still responsible for integrating various stages of production horizontally and vertically. In some branches—e.g. coal mining—workers themselves have appreciated the need for change and are working to remove these structures.

Legislative measures (required *inter alia* to harmonise Bulgarian and EU laws)
- ***Empowering banks to collect overdue loans.*** This should apply to both private and state-owned enterprises.
- ***Liberalising labour regulations.*** The minimum wage, the employer's obligation to pay nearly all social security contributions, and restrictions on staff retrenchment, limit efficient management of labour and retard development of a competitive market.
- ***The Competition Law.*** The Commission for Protection of Competition (CPC) should have power to combat unfair and anti-competitive actions of the state. While they have fewer opportunities, private firms also incline to restrictive trade practices. Practices subject to review should include:

    Horizontal mergers. The Competition Protection Act does not distinguish between vertical and horizontal integration. Current antitrust doctrine holds that only horizontal integration is always socially detrimental. Vertical integration can have positive social effects, by reducing average costs and retail prices.

    Exclusive dealing and assignment of markets.

    Refusal to sell (where it involves abuse of market power).

Expanding market information

Government can enhance competition by helping to increase the availability of certain kinds of information to the business community and consumers. Collating and publicising information on business laws and regulations requires a considerable effort. Traditional

channels for expanding access consist of regulatory agencies, consultancies and financial markets. Commodity exchanges and stock markets, apart from their intermediation role, are the main source of information to market participants on prices, capital structure and profitability.

The bottom line

Government's primary focus in promoting Bulgaria's market economy should be *deregulation*. Its participation in business should be confined to areas characterised by "market failure", notably education, health, social protection, defence and branches of infrastructure where its support is necessary to develop specialised inputs. Government's new role is to assist in creating long-term competitive advantages for Bulgaria by promoting free entry of new firms and foreign investment; ensuring producers access to inputs at competitive prices; and establishing industrial standards and conducting public procurement in ways that promote rather than hinder competition.

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